



# **2004 Personal Income Tax Software Developer's Guide**

Note: This document based on **2004** Forms date 10/01/2004

## **Part 1**

General Information

Tables

Data Specifications

2004 Forms and Schedules Changes

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Document Revisions

# **Tax Year 2004 Processing Year 2005**

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Because of sizing issues when converted to PDF format, the data layouts are a separate document.

## Introduction

The Commonwealth of Massachusetts, Department of Revenue (DOR) will be accepting 2-D barcodes on the Massachusetts Resident Income Tax return Form1, and Schedules B, C, CB, D, E, INC, X/Y/Z and Form 1-NR/PY, Massachusetts Nonresident Income Tax return and Schedules B, C, CB, D, E, INC, X/Y/Z, NTSL-NR & F for tax year 2004.

All vendors must use the transparent films and the attached tables to determine field sizes and locations. Do not use the Red, DOR published forms for anything more than general information. The Red forms have more text required than the vendor version. Also, physically larger data area to accommodate handwriting means smaller data fields than the films. This significantly changes the look of the forms relative to the vendor version of the forms.

The Resident Form1 layout contains select data from the Resident Form1 Return, Schedule X/Y/Z, Schedule B, Schedule D and Schedule CB. The Nonresident Form1 (NR/PY) layout contains select data from Schedule X/Y/Z, Schedule B, Schedule D and Schedule CB.

The software must advise taxpayers to review their entire return for accuracy and completeness, paying close attention to:

Social Security number correctness;

Name and Address information

If name and address has changed from the prior filing season, the name and address changed box must be checked.

The department has experienced problems with taxpayer address information being correctly presented. Specifically, the use, or lack there-of, of the "Care-of" data items. Please review Taxpayer Registration Rules outlined later in this document as they have been revised from last season to include samples. Also, a separate apartment number field has been added. See "Changes to 2004 Massachusetts Income Forms and Schedules" section for details.

The software must ensure that Name, Address and Social Security information is present prior to printing the return. (Rules governing the fields associated with name and address can be found in the section labeled as Taxpayer Registration Rules)

The software must also contain a brief explanation of what a 2-D barcode is. Also, inform taxpayers that any changes made to a return after printing will not be reflected in the 2-D barcode unless they print a new return. Failure to print a new return, after making changes, will severely impact DOR processing and will introduce errors. Handwritten changes on computer-generated returns are not acceptable and will be given lowest priority within the data workflow.

The software must ensure that printed data and encoded data in the 2-D barcode match exactly, except where noted in this document.

Form M-2210, Form M-4868 & Schedule D-IS though not included in the 2 Dimensional barcode solutions, as needed, must be included in the documentation sent to the Department as part of the annual Income Tax filing.

Our electronic filing specifications have not changed, they still include the W-2 and 1099 forms. If the taxpayer prints the return – we would like the schedule INC to print. If the return is sent electronically – we would like the W-2 and/or 1099 forms in the same format that you send us every year.

For those vendors participating in both Massachusetts Personal Income, as well as Corporate Excise Tax, 2D filing solutions, a special note. A fundamental difference between the two filing solutions is that Excise 2D barcodes appear on every page of every form and schedule. However, Income 2D barcodes appear on page one of every form and schedule.

## General Specifications

Field Delimiter	Carriage Return
End of File Delimiter	“*EOD*”
Alphanumeric Data	only 1 space between characters for word separation, Left justified
Numeric Data	Whole dollar only, Rounded, Right justified Do not include 00 for pennies
Negative Numbers	Leading dash (-)
Unused Data	No Zero fill, No Blank fill
Paper size	8 1/5” x 11”
Orientation	Portrait
Printing	Single Sided 12 Point 10 Pitch Courier Upper Case only text ½ inch margin sides, top and bottom
Lines per Vertical inch	6 (1/16 <sup>th</sup> of an inch)
Characters per Horizontal inch	10 (1/10 <sup>th</sup> of an inch)
Paper weight	20 lb Bond minimum (non-recycled)
Paper Color	White
Print Color	Black
Print area Horizontal – first	Row 4
Print area Horizontal – last	Row 63
Print area Vertical – first	Column 6
Print area Vertical – last	Column 81
Prohibited	Shading Screens in the text area Reverse Characters (white on black background) Rotated text (Landscape printing) Logos and Seals No Dollar signs in Numeric fields No Commas in Numeric fields No Decimal Points No Pennies No parentheses to represent Negative numbers

The Department realizes that some specifications, such as paper and ink, are beyond the control of vendors. However, these specifications are critical to the successful implementation of the product and should be communicated to your customers.

## Mailing Instructions

Refund Returns	Massachusetts Department of Revenue PO Box 7001 Boston, MA 02204-7001
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Payment Returns	Massachusetts Department of Revenue PO Box 7002 Boston, MA 02204-7002
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### **NOTE:**

*It is imperative that **ALL** 2D barcoded personal income tax returns be sent to applicable P.O. box mentioned above. **ALL** 2D barcoded returns sent to these P.O. boxes are prioritized.*

*A 2D barcoded personal income tax return that is sent to any other Mass DOR P.O. box will be subject to delays in processing.*

## PDF417 Suggested Specifications

Encode type	Normal PDF417
DPI	300 dpi
Pixel shaving	ON
Code word count	variable
Encryption	
Error Correction Level	4
Mils	10.0
Data Columns	variable
Module Aspect Ratio	2.00 : 1
Data Rows	variable
X Dimension	3
Location	Reserved area top right corner of the forms Reserved space 3.75" x 1.5"
Max Characters	1500

## 1 Dimensional Barcode layout

The 1-D barcode of twelve characters plus leading and trailing asterisks is described here. (The Asterisks are not part of the 1-D value, but part of the Code 39 characteristics).

\*112233345555\*

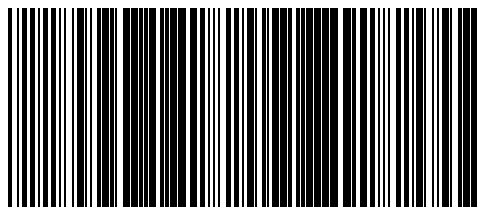
Field	Name	Characters	Value	Misc.
1	State ID	2	"MA"	
2	Year	2	"04"	
3	Form ID	3	Standard MASSTAX values.	See Table 3 for complete list of Form IDs
4	Page Number	1	Page number for form or schedule.	Physical page
5	Vendor ID	4	Four digit company ID assigned by NACTP	See Table 1 for complete list of Vendor codes

The following are the 1-D parameters:

- 1) Code 39 symbology
- 2) Twelve characters (not including the start and stop asterisk)
- 3) 2.5:1 wide narrow ratio
- 4) Height one inch
- 5) Length 2 1/2 inches.
- 6) An alphanumeric version of the 1-D barcode must appear in the exact position specified on the record layout. (see pdf for exact positioning. generally, to the right of the form name)
- 7) "X" dimension (the narrowest bar and/or space) must be at least 1.5 pts (approximately 20 mils or 3/144 ")
- 8) Each bar in the barcode must be solid. Streaks in the barcode are unacceptable.
- 9) A 1/4" quiet zone around the barcode must be maintained (the bottom edge can have one print line (approximately 3/16") of space below it)

The following barcode represents a potential 1-D barcode for the 2002 Form 1 (DOR hand-printed version).

MA020011M001



**Table 1: Vendor list with NACTP assigned vendor code**

<b>Vendor Codes by Company Name</b>	
1099 Express	1129
1099 Pro	1094
AA Services	1098
Aatrix Software, Inc	1048
Access Indiana	1047
Accounting and Computer Technology	1133
Accountware	1049
AD Computer Corp	1118
ADP, Inc	1050
Advantage Payroll Tax	1084
Alerio	1127
Alpine Data	1011
American Management Systems. Inc	1012
AME Software Products, INC.	1090
Anexsys	1143
Arthur Andersen	1014
ATX Forms	1015
Automation Technology Computing, Inc.	1146
Back to Basics	1016
Block Financial	1017
Business Software	1018
CCH Inc	1019
Ceridian Tax Services	1051
CFS Tax Software, INC.	1086
CPA Software	1021
C & S Technologies	1096
Comerford & CO, CPAs	1106
Compco Assoc	1141
Computerized Planning Systems	1142
Cougar Mountain Software	1130
Creative Solutions	1022
D & P Payroll	1132
D.A. Bailey & Sons Publishing Co., Inc.	1052
DPC, INC	1137
DPJ Software	1144
Data Technology Group	1053
Deloitte & Touche Tax Technologies	1023
Drake Enterprises	1024
Dunphy Systems, Inc	1025
EASI	1105
EG Systems	1139
ExacTax	1026
EZ Laser Software Division of Rahill, LLC	1087
Federal Liaison Services (FLS)	1027
Federation of Tax Administrators	1028
FileSafe, Inc.	1126
Fileyourtaxes.com	1115

FinSys, Inc	1134
Fleet	1078
FormsPlus Software	1123
Freedom Group	1140
FreeTaxPrep.com	1081
Gardenville Community Center	1055
GaylerSmith	1083
Go Direct Mailing Services, Inc.	1119
Golden Rule Computer Systems	1136
GovConnect	1110
Grant Wood A.E.A.	1131
GTR Data, INC.	1088
H & R Block	1029
HD Vest	1080
Harbor Central.com	1074
Hatley Computer Company	1056
IDMS	1107
Imaging Business Machines	1111
Internet Tax Group	1079
Interpay	1070
Intuit	1030
J & M Business Service	1138
Jackson Hewitt Tax Service	1031
Jackson Insurance	1073
Lacerte Software Corp	1032
Lackner Group, Inc.	1147
LexisNexis	1128
Logicon	1082
MasterTax	1122
Medlin Accounting Shareware	1092
Micro Vision Software	1057
Microsoft	1033
Mitre Corp	1072
MYOB US	1112
NationTax Online	1077
Nelco	1034
Newport Wave , INC.	1100
No Limit Systems, LP	1113
NP Systems	1104
Orrtax	1035
PayChex	1124
Paycor	1121
PayCycle	1114
PC Software Accounting	1089
PDP Tax Service	1036
Parsons Technology	1058
Petz Enterprises, Inc.	1037
Plenary Systems, Inc.	1097
Price Waterhouse LLC	1059
PrimePay	1148



PRO Business	1060
RefundsNow/Republic Bank and Trust	1116
Rhodes Computer Software	1038
RIA	1062
Ron Callis CPA	1063
Sage BestSoftware	1117
Saxon Tax Software	1076
Second Story Software	1064
Spokane Computer, Inc.	1093
Stallion Software	2601
tax agency of New Mexico	1135
STF Service Corp	1039
Storen Tax Serice	1145
SunGard Bi Tech	1125
Suran Systems	1108
Tax Accounting Systems	1103
Taxbyte, Inc	1041
Tax Form Library	1065
Taxlink, Inc	1066
Tax Masters/Household Bank, FSB	1042
TaxShop	1071
Tax Simple, Inc.	1067
Taxware Systems	1068
Taxworks by Laser Systems	1043
Teamstaff, Inc/DSI Payroll Services	1091
TFP Data Systems	1095
TK Publishing, Inc	1044
Tri Tech Software Dev Corp	1069
Universal Software Solutions	1102
Universal Tax Systems, Inc	1045
VT State Housing Authority	1085
Versatile Group	1099
Vertex, Inc.	1120
Visual Forms	1100
AD Computer Corp.	1118

<b>Vendor Codes by Assigned Number</b>	
Alpine Data	1011
American Management Systems. Inc	1012
Arthur Andersen	1014
ATX Forms	1015
Back to Basics	1016
Block Financial	1017
Business Software	1018
CCH Inc	1019
CPA Software	1021
Creative Solutions	1022
Deloitte & Touche Tax Technologies	1023
Drake Enterprises	1024
Dunphy Systems, Inc	1025
ExacTax	1026
Federal Liaison Services (FLS)	1027
Federation of Tax Administrators	1028
H & R Block	1029
Intuit	1030
Jackson Hewitt Tax Service	1031
Lacerte Software Corp	1032
Microsoft	1033
Nelco	1034
Orrtax	1035
PDP Tax Service	1036
Petz Enterprises, Inc.	1037
Rhodes Computer Software	1038
STF Service Corp	1039
Taxbyte, Inc	1041
Tax Masters/Household Bank, FSB	1042
Taxworks by Laser Systems	1043
TK Publishing, Inc	1044
Universal Tax Systems, Inc	1045
Access Indiana	1047
Aatrix Software, Inc	1048
Accountware	1049
ADP, Inc	1050
Ceridian Tax Services	1051
D.A. Bailey & Sons Publishing Co., Inc.	1052
Data Technology Group	1053
Gardenville Community Center	1055
Hatley Computer Company	1056
Micro Vision Software	1057
Parsons Technology	1058
Price Waterhouse LLC	1059
PRO Business	1060
RIA	1062
Ron Callis CPA	1063
Second Story Software	1064

Tax Form Library	1065
Taxlink, Inc	1066
Tax Simple, Inc.	1067
Taxware Systems	1068
Tri Tech Software Dev Corp	1069
Interpay	1070
TaxShop	1071
Mitre Corp	1072
Jackson Insurance	1073
Harbor Central.com	1074
Eastman Kodak	1075
Saxon Tax Software	1076
NationTax Online	1077
Fleet	1078
Internet Tax Group	1079
HD Vest	1080
FreeTaxPrep.com	1081
Logicon	1082
GaylerSmith	1083
Advantage Payroll Tax	1084
VT State Housing Authority	1085
Stallion Software	2601
CFS Tax Software, INC.	1086
EZ Laser Software Division of Rahill, LLC	1087
TFP Data Systems	1095
GTR Data, INC.	1088
PC Software Accounting	1089
AME Software Products, Inc.	1090
Teamstaff, INC./ DSI Payroll Services	1091
Medlin Accounting Shareware	1092
Spokane Computer, INC.	1093
1099 PRO	1094
C & S Technologies	1096
Plenary Systems, Inc.	1097
AA Services	1098
Versatile Group	1099
Visual Forms	1100
Newport Wave, Inc.	1101
Universal Software Solutions	1102
Tax Accounting Systems	1103
NP Systems	1104
EASI	1105
Comerford & CO, CPAs	1106
IDMS	1107
Suran Systems	1108
Business Software, INC.	1109
GovConnect	1110
Imaging Business Machines	1111
MYOB US	1112
No Limit Systems, LP	1113

PayCycle	1114
Fileyourtaxes.com	1115
RefundsNow/ Republic Bank and Trust	1116
Sage BestSoftware	1117
AD Computer Corp.	1118
GO Direct Mailing Services, Inc.	1119
Vertex, Inc.	1120
Paycorp	1121
Master Tax	1122
FormsPlus Software	1123
PayChex	1124
SunGard Bi Tech	1125
FileSafe, Inc.	1126
Alerio	1127
LexisNexis	1128
1099 Express	1129
Cougar Mountain Software	1130
Grant Wood A.E.A	1131
D & P Payroll Service	1132
Accounting and Computer Technology	1133
Finsys, INC	1134
State of NM	1135
Golden Rule Computer Systems	1136
DPC, Inc	1137
J&M Business Service	1138
EG Systems	1139
Freedom Group	1140
Compco Associates	1141
Computerized Planning Systems	1142
ANEXSYS	1143
DPJ Software	1144
Storen Tax Service	1145
Automation Technology Computing, Inc	1146
Lackner Group, INC	1147
PrimePay	1148
BVS Corp	1149
Independent Systems and Programming, Inc.	1150
Reynolds and Reynolds	1151
Watauga Medical Center	1152
VB Systems	1153
HJP Associates, INC.	1154

**Table 2: 2-D Barcode size and location**

<b>Form</b>	<b>Max Byte Per Form</b>	<b>Barcode Location</b>	<b>Total Barcode Per Return</b>	<b>Physical Pages</b>	<b>Max Number Form / Schedule per return</b>
Form1	979	Form1 Pg 1	1	2	1
Schedule INC	1028	Pg 1	As needed	1	As needed
Schedule C	432	Pg 1	As needed	2	As needed
Schedule D	208	Pg 1	As needed	1	1
Schedule B	318	Pg 1	As needed	2	1
Schedule D-IS	N/A	N/A	N/A	5	1
Schedule CB	167	Pg 1	As needed	1	As needed
Schedule E	198	Pg 1	As needed	1	1
Schedule X/Y/Z	61	Pg 1	As needed	1	1
Form 1-NRPY	1209	Form-NRPY Pg 1	1	3	1
Schedule NTSLNR/F	263	Pg 1	As needed	1	As needed

**Table 3: Form ID**

The Numeric Form ID below is used in both the 1-D barcode and the 2-D barcode header section.

<b>Form</b>	<b>Form ID</b>
Form1	001
Schedule B	010
Schedule C	011
Schedule CB	026
Schedule D	012
Schedule E	013
Schedule D-IS*	027
Schedule X/Y/Z	XYZ
Schedule INC	INC
Form-1 NRPY	006
Schedule NTSLNR/F	021
Form M-4868*	046
Form M-2210*	016

\* Not currently part of the 2D solution.

## Data Specifications

### Form-1

The Form1 layout has selected Form1 data as well as Schedule X/Y/Z data, Schedule B, Schedule D data and Schedule CB data. Only one Form-1 per Return Filing is allowed.

The importance of accurate taxpayer name and address information is self evident and as important is consistency. To that end, attached below are standard addressing abbreviations that are to be used when formatting the data for BOTH print and 2D encoded address fields.

As part of the address, Apartment number, Suite number and Room number should be put into the Apartment Number field.

If the taxpayer or spouse is deceased, prefix the First Name field with the following text as appropriate. Taxpayer: "ESTATE OF " or Spouse: "OR ESTATE OF ". The text is in all capital letters and, if need be, the first name would be truncated. Lastly, there is a space after the "F" of "OF".

In cases where a Decedent's Return is to be filed, The Refund Claimant's Name must appear in the Care Of line of the Address.

When filing a Joint return, the spouse's social security number must be present. In cases where the spouse is a Non-Resident Alien, use NRANRANRA as the social security number. If the spouse has applied for, but not yet received, a number, use APPAPPAPP as the social security number.

When filing as a Married filing Separate filing status, the spouse social security number must be present.

Line 8, Unemployment, has part A & B, representing Unemployment and Mass State Lottery winnings. The data subtotals across to the Line 8 field.

Line 13, if not taking this deduction, the number of children MUST be zero or blank.

Care must be taken when programming the Rental Deduction amount, as the amount must be half the total rent for the year to a MAXIMUM of \$3,000.

In the event the taxpayer is eligible to take the "No Tax Status" designation, the remainder of the form MUST still be completed.

Earned Income Credit, if not being taken, the number of children MUST be zero or blank.

### Form-1NRPY

The Form1NRPY layout has selected Form1 NRPY data as well as Schedule X/Y/Z data, Schedule B, Schedule D data and Schedule CB data. Only one Form-1NRPY per Return Filing is allowed.

The importance of accurate taxpayer name and address information is self evident and as important is consistency. To that end, attached below are Standard Addressing abbreviations that are to be used when formatting the data for BOTH print and 2D encoded address fields.

As part of the address, Apartment number, Suite number and Room number should be put into the Apartment Number field.

If the taxpayer or spouse is deceased, prefix the First Name field with the following text as appropriate. Taxpayer: "ESTATE OF " or Spouse: "OR ESTATE OF ". The text is in all capital letters and, if need be, the first name would be truncated. Lastly, there is a space after the "F" of "OF".

In cases where a Decedent's Return is to be filed, The Refund Claimant's Name must appear in the Care Of line of the Address.

When filing a Joint return, the spouse's social security number must be present. In cases where the spouse is a Non-Resident Alien, use NRANRANRA as the social security number. If the spouse has applied for, but not yet received, a number, use APPAPPAPP as the social security number.

When filing as a Married filing Separate filing status, the spouse social security number must be present.

Line 10, Unemployment, has part A & B, representing Unemployment and Mass State Lottery winnings. The data subtotals across to the Line 10 field.

Line 13, income apportionment, requires special mention here. There are instances when a taxpayer and spouse each have different methods of apportioning their income. For example, a husband and wife are both long haul truck drivers. The husband may find it better to apportion his income generated in Massachusetts by the number of miles he drives in the state. The wife, who works part time, may find it better to apportion by the number of days she drives in Massachusetts.

If the vendor software allows such a scenario, there is room set aside in the 2D barcode layout that allows for 2 sets of apportionment data to be captured. You will see that there are data items named "T Basis" (field 62) and "S Basis" (field 70) and they both refer to line 13a of the Form-1NRPY. If the vendor software does not allow for this scenario, then the series of "S" fields for line 13 is simply left blank.

Line 17, if not taking this deduction, the number of children MUST be zero or blank.

Care must be taken when programming the Rental Deduction amount, as the amount must be half the total rent for the year to a MAXIMUM of \$3,000. (Apportioned as necessary)

In the event the taxpayer is eligible to take the "No Tax Status" designation, the remainder of the form MUST still be completed.

Earned Income Credit, if not being taken, the number of children MUST be zero or blank.

## Schedule B

Only one Schedule B per Return Filing is allowed. The Schedule B layout EXCLUDES data found in the Form1 or NRPY layout. We do not want to duplicate data

## Schedule C

As many Schedule C per Return Filing as needed.

## Schedule CB

As many Schedule CB per Return Filing as needed.

The Schedule CB layout has fields NOT found in the Form1 or NRPY layout. We do not want to duplicate data.

Senior circuit breaker maximum amount is \$820. (Lines 20 & 24)

Line 2 maximum valuation is \$441,000

Line 12 maximum amounts is as follows:

Single - \$44,000

HOH - \$55,000

Joint - \$66,000

## Schedule D

Only one Schedule D per Return Filing is allowed. The Schedule D layout EXCLUDES data found in the Form1 or NRPY layout. We do not want to duplicate data.

## Schedule D-IS

New for 2003, only one Schedule D-IS per Return Filing is allowed. Not part of the 2D solution but must be included in the filed return, as needed.

## Schedule E

Only one Schedule E per Return Filing is allowed.

## Schedule INC

As many Schedule INC per Return Filing as needed. Schedule INC contains select W-2 and 1099 taxpayer and spouse data; there is no requirement that the paper versions of these forms be attached to the taxpayer's return. It replaces up to 20 forms W-2, W-2G, 1099R, 1099MISC or 1099G; the taxpayer is to retain those forms for 3 years.

All W-2 and 1099 earnings must be reported on Schedule INC. This schedule MUST be included with the return. Failure to submit Schedule INC WILL delay any applicable refund, as the return will be considered incomplete. Multiple Schedule INC may be submitted as needed. Totals at the bottom of the schedule represent the totals for that page only.

Use this matrix to determine where to get the data for the Schedule INC. The FID that's required on the Schedule INC is located in Box b on the Taxpayer's W2 form, but its found elsewhere on the 1099-R form. State Income on the Schedule INC is found in box 1 of the W2G form, and box 1 of the Federal version of the 1099-G form. Taxpayer & Spouse Social Security amounts are only found on the W2 forms; no other forms have that data.

<b><u>Form</u></b>	<b><u>Fed ID No.</u></b>	<b><u>State Income</u></b>	<b><u>State Withheld</u></b>	<b><u>Taxpayer Social Sec</u></b>	<b><u>Spouse Social Sec</u></b>
W2	Box b	Box 16 & Box 8 as needed	Box 17	Box 4 & Box 6 as needed	Box 4 & Box 6 as needed
W2G	Top Left Corner	Box 1	Box 14	N/A	N/A
1099-R	Top Left Corner	Box 12	Box 10	N/A	N/A
1099-Misc	Top Left Corner	Box 18	Box 16	N/A	N/A



Fed 1099-G	Top Left Corner	N/A	Box 5	N/A	N/A
MA 1099-G	Top Left Corner	Box 3 *	Box 5	N/A	N/A

(\*) Massachusetts 1099-G has 2 fields on the bottom half of the form. One is the “Repayment” amount, the other is “Credits”, both of which are subtracted from the amount in Box 3. Instructions for the taxpayer must be very clear on how to handle this form.

### Schedule NTSL-NR / F

As many Schedule NTSL-NR / F per Return Filing as needed. If multiple Schedule F's are required, then any data pertinent to the NTSL-NR must be cleared for those additional subsequent versions after the first one. Special care must be paid to fields 11 and 12 in the 2D layouts to track the multiple barcodes. See below: Handling Multiple Instances of the Same Schedule

### Schedule X/Y/Z

Only one Schedule X/Y/Z per Return Filing is allowed.

### Other

With the exception of Form M-2210 & Form M-4868, those forms and schedules NOT in Table 2 will not have a 2-D barcode and must be retained by the taxpayer for 3 years. Form M-2210 & Form M-4868 still must be sent with the return as needed.

### Attachment Inventory

The inventory fields are in place to help the Department verify document integrity. If the inventory contains two Schedule Cs then our recognition software will also equal two. We will validate against misidentified forms and schedules, as well as request submission from the taxpayer for those truly missing forms and schedules.

In the 2-D layouts below, field 10 represents an inventory; physical page count for the return. For example, if the return only consists of a Form1 and one Schedule INC, then the count would be 3: Form1 front and back and 1 Schedule INC. Another example, Form1 and two Schedule Cs, the count would be 6: Form1 front and back and Schedule C front and back twice. In the event that a given 2-D barcode cannot be read, the inventory is repeated in every barcode.

In the Form1 2-D barcode, fields 11 through 19 show a breakdown of what is included in the taxpayer's return. Most often, field 11 would be one (1) meaning there is one Form1 in the return; field 12 could be either zero (0) or one (1); field 13 could be zero (0) or whatever the number of Schedule C's were included in the return.

To reiterate for clarity, field 10 counts the number of sides of every piece of paper that has taxpayer data on it. However, fields 11 through 19 count the number of a given form type that is included in the return. Field 19 counts those form types NOT expressly represented in Fields 11 through 18. Field 19 should not include any worksheets (for example AGI calculation) nor should explanatory or overflow attachments be included. It should include any form or schedule (Massachusetts or Federal or Other State's) to be mailed to DOR as part of the return being filed.

### Handling Multiple Instances of the Same Schedule

Also in the 2-D layout, fields 11 and 12 are to be used when multiples of the same schedule is submitted. For example, if three Schedule C forms were sent as part of the return, then the first instance of the Schedule C would have field 11 as 1 and field 12 as 3. The second Schedule C would have field 11 as 2 and field 12 as 3, and lastly, the third Schedule C would have field 11 as 3 and field 12 as 3. If only one Schedule E was supplied, then field 11 and field 12 would both be 1. In the event that any given 2-D barcode cannot be read, the schedule inventory for the return is repeated in every barcode.

### Taxpayer Registration Rules

The following rules are for both the PRINTED data and the ENCODED data in the 2-D barcode.

- . Alpha characters must be in upper case only
- . Use no punctuation or symbols. If a fraction is part of the street address, enter a forward facing slash (/). Note: This is the ONLY symbol that may be used in the taxpayer name and address area. *Hyphens and Apostrophes are also prohibited.*
- . Do Not include titles or ranks such as DR, MD, ENSIGN, SGT etc.
- . Use Roman Numerals (alpha character) for numeric suffixes
- . Never allow a space in a name field except as a prefix to JR, SR, II etc
- . The SSN must be nine digits (no dashes)
- . An address of a Post Office Box is formatted in the following manor:  
PO BOX ####. All capital letters, one space between the "O" of "PO" and the "B" of Box, one space after the "X" in BOX, and as many digits as needed for the box number.
- . Use standard abbreviations for the suffix of the street name. (included below)
- . Additional address field is a supplemental field used for "in care of" name and additional address information as needed.
- . If there is an Apartment number, a Suite number or a Room number in the address, that information should be placed in the Apartment number field. Do not include the "APT" prefix or any characters other than numbers or letters.

#### Example 1

Joe Campus	Taxpayer Name
Apt 1202	Apartment No
1423 Massachusetts Ave	Street
Boston MA 02127	City State Zip

#### Example 2

Bill Blast	Taxpayer Name
c/o Lenny Lawyer	Care of line 1
Suite 1123 A	Apartment No
121 Samuel Adams SQ	Street
Boston MA 02128	City State Zip

#### Example 3

Sean Clark	Taxpayer Name
11 Russell Drive	Street
Walton and Weybridge WWQ 72	Care of line 1
England	Care of line 2

Military "APO" or "FPO" addresses

- Enter "APO" or "FPO" in the first three positions of the city field
- DO NOT enter the name of the city for "APO" and "FPO" addresses; and
- Enter two-digit state code in the state field:

State Code    ZIP code range

AA	34000 – 34099
AE	09000 – 09999
AP	96200 – 96699 and 98700 – 98799

- In the state field, use the standard two-digit abbreviation for the state or United States possessions. (included below)

- If foreign address, enter country beginning in the state field

ZIP code can be 9 or 5 digits (no dash)

Standard Abbreviations

Air Force Base	AFO	Parkway	PKY	Apartment	APT
Place	PL	Avenue	AV	Post Office Box	PO BX
Boulevard	BL	Road	RD	Building	BLDG
San	SN	Circle	CIR	South*	S
Court	CT	Southeast*	SE	Department	DEPT
Southwest*	SW	Drive	DR	Space	SP
East*	E	Square	SQ	Highway	HWY
Street	ST	Lane	LN	Suite	STE
North*	N	Terrace	TER	Northeast*	NE
Unit	UN	Northwest*	NW	Way	WY
Number	NO	West*	W	<b>*abbreviate only when used as a direction</b>	

State or U.S. Possessions Abbreviations

Alabama	AL	Montana	MT	Alaska	AK
Nebraska	NE	American Samoa	AS	Nevada	NV
Arizona	AZ	New Hampshire	NH	Arkansas	AR
New Jersey	NJ	California	CA	New Mexico	NM
Colorado	CO	New York	NY	Connecticut	CT
North Carolina	NC	Delaware	DE	North Dakota	ND
District of Columbia	DC	Northern Mariana Islands	MP	Federated States of Micronesia	FM
Ohio	OH	Florida	FL	Oklahoma	OK
Georgia	GA	Oregon	OR	Guam	GU
Palau	PW	Hawaii	HI	Pennsylvania	PA
Idaho	ID	Puerto Rico	PR	Illinois	IL
Rhode Island	RI	Indiana	IN	South Carolina	SC
Iowa	IA	South Dakota	SD	Kansas	KS
Tennessee	TN	Kentucky	KY	Texas	TX
Louisiana	LA	Utah	UT	Maine	ME
Vermont	VT	Marshall Islands	MH	Virgin Islands	VI
Maryland	MD	Virginia	VA	Massachusetts	MA
Washington	WA	Michigan	MI	West Virginia	WV
Minnesota	MN	Wisconsin	WI	Mississippi	MS
Wyoming	WY	Missouri	MO		

## Changes to 2004 Massachusetts Income Forms and Schedules

### **General**

Taxpayer address clarification and use of Care of lines

The transparent films have the cells numbered.

The tables in part two of this document have the coordinates of the left most position of each field included under "Location".

### **Form1**

A new field was added to the bottom of page 1. The Waiver of filing Electronically is to be filled in the event that a taxpayer does not want the return filed electronically.

Apartment Number is a new field added at the END of the 2D barcode for Form-1 and Form-1 –NRPY. This field is to be populated with apartment number/suite number/room number if the data is initially captured by the software in a separate data field. Acceptable values are numeric digits and alpha letters. DO NOT include apt prefix, pound sign (#), dashes or any other special characters. Please discontinue the practice of concatenating street address and apartment number values. When printing, the apartment number is a separate field on the form now.

### **Form1-NRPY**

A new field was added to the bottom of page 1. The Waiver of filing Electronically is to be filled in the event that a taxpayer does not want the return filed electronically.

A Non-Resident Composite Return type was added to Part-year and Full-year non-resident Return type.

Apartment Number is a new field added at the END of the 2D barcode for Form-1 and Form-1 –NRPY. This field is to be populated with apartment number/suite number/room number if the data is initially captured by the software in a separate data field. Acceptable values are numeric digits and alpha letters. DO NOT include apt prefix, pound sign (#), dashes or any other special characters. Please discontinue the practice of concatenating street address and apartment number values. When printing, the apartment number is a separate field on the form now.

### **Schedule INC**

No Changes

### **Schedule X**

No Changes

### **Schedule Y**

New deduction, Commuter deduction.

The schedule Y subtotal calculation must be adjusted to include the new deduction

### **Schedule Z**

No Changes

### **Schedule B**

No Changes

### **Schedule C**

No Changes

11/8/2004

Rev 2004-2.0

**Schedule CB**

Home maximum value increased  
Qualifying income increased for all filing status'  
Circuit Breaker Credit maximum increased

**Schedule D**

No Changes

**Schedule E**

No Changes

**Schedule NTSL-NR**

No Changes

**Schedule F**

No Changes

**Vendor requirements for passing certification testing**

DOR does acknowledge that not every vendor can maintain the same level of sophistication in terms of what types of tax scenarios its software can handle. DOR takes a fiduciary responsibility to the taxpayers in certifying a vendor as acceptable. DOR does expect vendors to provide the highest possible quality in the areas of appearance, functionality and accuracy in delivering their product to the market place.

See Massachusetts Department of Revenue Publication 'Handbook for Reproduction of Non-Scannable Department of Revenue Forms' Section 1.3 for guidance regarding who needs to pass certification testing. To paraphrase: Any company that develops and uses substitute Massachusetts Department of Revenue forms MUST get approval from the Department. If the company develops substitute tax forms using its own tax software; develops tax software programs to be used with substitute tax forms developed by another company; or, develops substitute tax forms for other companies to use with their tax software.

The company must have forms reviewed annually prior to release of the substitute forms. In enough cases to be noticed by the department, some customers were submitting returns created using pre-approved and not up to date software. DOR mails those returns back to taxpayers with an explanatory letter.

For those vendors passing certification, they must provide a copy of their DOR Approval letter to tax practitioners or other vendors who sell the products of tax software developers who design substitute tax forms. (See also, Section 1.4 of 'Handbook for Reproduction of Non-Scannable Department of Revenue Forms')

Vendors are encouraged to submit test samples early to avoid approval delays. DOR will make every effort to review and approve forms within 10 days of receipt. See contact list for where to submit test forms.

Forms will be tested for format and readability in the order in which they are received by the department. DOR only approves the appearance of the printed substitute form, the 1-D barcode value and the 2-D barcode readability. DOR does not certify the logic of specific software, nor calculations entered on any forms. DOR does not approve specific equipment or the process used in producing the substitute forms, but does require that the substitute forms meet the department's standards.

Failure to comply with these requirements WILL cause returns to misread and reject as errors in processing. As a result, issuance of refund checks will be slowed to customers. DOR will capture vendor data and monitor processing results. Specifically, we will track readability of returns with respect to field read rates as well as tracking 2-D barcode read problems. (Not printer introduced problems for which the vendor has no control)

Each page has a unique 1-D barcode that the imaging software uses to identify the page in the event that the 2-D barcode cannot be read.

### Fixed (exact) Positioning

DOR requires exact positioning for all data elements on all forms and schedules for certification as well as the 2-D barcode readability. Certification status will be posted on the DOR's web site at <http://www.mass.gov/dor>

All optical scanner enabled forms are required to have anchors. The anchors must be placed in accordance with the department's exact positioning requirements for that form. Each form must contain the exact number of tax data fields, taxpayer ID fields, line items, optical mark fields and keying symbols as the state issued form. The location of all OCR-readable fields must appear in the exact location as specified in the record layout. Those returns not following the exact positioning requirements will be given a lower priority than those following the requirements. DOR has an Imaging based automatic data capture system in place. Image based technology requires exact positioning for data to be captured. In the event that a 2-D barcode is unable to be read, the exact positioning will allow software to capture and "read" the data.

### Anchors

- . Four anchors, one in each corner, must be present on all pages
- . Anchors must be in the exact same location on all pages and must be in the exact location specified in the transparent films sent to each vendor
- . Each anchor must consist of an angle bar formed by the intersection of one horizontal and one vertical line
- . line thickness should be 3 points (3/72").
- . line length should be 1/4"
- . No solid, filled (black) area should be with 2cm (approximately 3/4") of any anchor

### Data Entry Keying marks

- . Data Entry keying symbols must be produced where applicable. If you are unable to reproduce an arrow, you may substitute a bullet.

### Optical Mark Fields

- . A single upper case "X" must be used to indicate a response in an optical mark field
- . No underlining or enclosing of optical mark fields
- . One blank character space must immediately proceed and follow an optical mark field

- . If a field is not applicable, it must be left blank.

#### Negative Amounts

- . Negative amounts or losses must be preceded by a minus sign (“-“)
- . Use of parentheses or “X” boxes (as found on the official Department produced version of the forms) is not acceptable
- . Language regarding the use of “X” boxes must not be printed on the substitute forms

#### Signature Area

- . Taxpayer signature and paid preparer information and signature area must be formatted in the same manner as the official Department form
- . Underlining is permitted only in the area allotted for the taxpayer’s, spouse’s and paid preparer’s signatures

#### Privacy Act Notice

- . “Privacy Act Notice available upon request” verbiage must appear on page 1 of the return
- . The verbiage should appear where indicated on the transparent films provided to the vendors
- . If need be, the verbiage may be printed elsewhere, provided that it not interfere with any OCR fields
- . The Privacy Act Notice must be made available to the software user by the software developer.
- . It may be presented in either printed “hard-copy” or software “soft-copy” formats

#### The department’s acceptance criteria are as follows.

Can we read the 2-D barcode?

Is the data within the 2-D barcode located in the correct field?

Can we read the 1-D barcode?

Is the 1-D barcode correct per page?

Are the 1-D and 2-D barcodes correctly sized and located?

Using the transparent films provided to the vendors, do anchors and fields on the test samples line up to the films, within REASONABLE tolerances?

Those vendors providing Massachusetts Personal Income Tax Forms and Schedules must pass **BOTH** the 2D and exact positioning requirements.

## Massachusetts DOR Contact List

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617-887-5627

### **NOTE:**

*It is imperative that all **SCANNABLE** personal income tax form samples be sent to the address mentioned above. All **SCANNABLE** personal income tax form samples sent to this address are prioritized.*

*Any **SCANNABLE** personal income tax form sample that is sent to any other Mass DOR mailing address will be subject to delays in form testing/approval*

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[trainorc@dor.state.ma.us](mailto:trainorc@dor.state.ma.us)  
617-626-2812

### **NOTE:**

*It is imperative that all **NON-SCANNABLE** personal income tax form samples be sent to the address mentioned above. All **NON-SCANNABLE** personal income tax form samples sent to this address are prioritized.*

*Any **NON-SCANNABLE** personal income tax form sample that is sent to any other Mass DOR mailing address will be subject to delays in form testing/approval*



## Document Revisions

Updates to this document will be posted to DOR's Web site <http://www.mass.gov/dor> on Friday afternoons. Please check for updates over the weekend or on Monday mornings to ensure that you have the most current document.

This page is included to track changes between published revisions of this document.

Number	Date	Revision
2004-1.0	9/30/2004	Added Grid coordinates of data fields to tables
		Grids have Columns & Rows numbered for easier reference
		New Form-1 & NRPY field, Waiver of Electronic Filing
		NRPY has new return type, Non-Resident Composite Return
		Additional Deduction on Schedule Y, Commuter Deduction
		Schedule CB, maximum threshold increase to Home value,
		Qualifying income and Circuit Breaker Credit.
		Additional guidelines for Name and Address fields.
2004-1.1	10/14/2004	NRPY Bank interest clarify. References line 7a now.
		Contact Update
		New grids were released that have updated cell numbering scheme. The new scheme effects the location portion of the field data matrix. Part 2 updated to reflect new numbering.
		Adjusted Table 2 to reflect additional line items.
2004-2.0	11/08/2004	Pending legislative changes affecting the forms. See General Changes to Mass Forms, page 20.
		Finalized Specifications
		Removed "Pending Legislation" notation.
		Apartment number field is new since the last release.
		Apartment number field explained on page 20 and Taxpayer Registration Rules adjusted accordingly.
		Address Change Field moved to allow for Apartment Number Field